REMARKS

With the foregoing amendment, Claims 1-4 and 6-28 are pending in the application. Claim 5 is canceled and Claims 14-17 have been withdrawn with traverse. New Claims 24-28 are added. By this Amendment, the Applicant amends Claims 1, 6, 7, 8, 9, 18, 20, 21, 22, and 23 and respectfully traverses the Examiner's rejections under 35 U.S.C. § 102 and 35 U.S.C. § 103. The Applicant also respectfully traverses the Examiner's rejection under 35 U.S.C. § 112.

In the non-final Office Action, the Examiner rejected Claims 1-13 and 18-23 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. More specifically, the Examiner states on page 3 of the Office Action:

> The claims call for the central region to have a firmness reduced by about ten percent to about thirty percent relative to other regions of the mattress; however, the specification is contrary to such ratio as evidenced on page 6 of the specification wherein it is stated that it is ten percent to thirty percent firmer in the center region 102 than in abutting side regions 104.

The Application as originally filed, however, includes paragraphs 0006 through 0014 that describe a central region and/or second region having "a firmness reduced by about ten percent to about thirty percent relative to other regions of the mattress" (See Application paragraphs 0008, 0009, 0010, 0011, 0012, and 0013). Thus, Claims 1-13 and 18-23 are supported by the application specification as originally filed.

Furthermore, the Application describes the use of a central and/or second region having firmness that is either reduced "or" (emphasis added) increased relative to other regions of the mattress. According to paragraph 0023:

> One or more adjustable members 120 may be provided to adjust firmness within the center region 102 or to compensate for the development of a ridge within the center region 102 as the mattress ages. The one or more adjustable members 120 ...controllably stiffen or elevate this region of the mattress, or controllably reduce the stiffness to remove an emerging center ridge.

The Applicant has amended Claims 6, 7, 8, 9, 18, 20, and 22 to indicate that the center region may have a firmness that is reduced or increased relative to other regions of the mattress. Support for reduced firmness in the center region is provided in Application paragraphs 0008, 0009, 0010, 0011, 0012, and 0013, among other places. Support for increased firmness in the center region is provided in Application paragraphs 0020, 0021, 0022, 0026, 0027, and 0028, among other places. Furthermore, support for a center region having either a reduced or increased firmness in relation to other regions of a mattress is explicitly provided in paragraph 0023, among other places, of the Application as originally filed.

The Examiner rejected Claims 1, 2, 6, 9, 12, 13, 18, 19, 21, and 22 under 35 U.S.C. § 102(b) as being anticipated by Talbert et al. (U.S. Patent No. 4,086,675) or Bonaddio et al. (U.S. Patent No. 5,537,699) or Fultz et al. (U.S. Patent No. 3,516,901). The Examiner rejected Claims 1, 2, 9-11, 18, 19, 21, and 22 under 35 U.S.C. § 102(b) as being anticipated by Klancnik (U.S. Patent No. 4,092,749). The Examiner rejected Claims 1, 2, and 21 under 35 U.S.C. § 102(b) as being anticipated by Sabalaskey (U.S. Patent No. 5,704,085). The Examiner rejected Claims 1, 2, 21, and 23 under 35 U.S.C. § 102(b) as being anticipated by Perry (U.S. Patent No. 2,345,421) or Jarvis (U.S. Patent No. 2,859,505).

The Examiner also rejected Claims 3 and 4 under 35 U.S.C. § 103(a) as being unpatentable over Talbert et al. or Bonaddio et al. or Fultz et al. or Klancnik or Sabalakey or Perry or Jarvis in view of Kentor et al. (U.S. Patent No. 3,608,107). The Examiner rejected Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Talbert et al. or Bonaddio et al. or Fultz et al. or Klancnik or Sabalaskey or Perry or Jarvis. The Examiner rejected Claims 6-8, 18-19, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Sabalaskey in view of Talbert et al. or Bonaddio et al. or Fultz et al. or Klancnik. The Examiner rejected Claims 6, 9, 18-20, and

22 under 35 U.S.C. § 103(a) as being unpatentable over Perry or Jarvis in view of Talbert et al. or Bonaddio et al. or Fultz et al. or Klancnik.

The present invention, in certain embodiments, includes a mattress having reduced-firmness materials along a central region traversing the mattress from its head end to foot end in order to mitigate the occurrence of a central ridge following repeated use of the mattress as a sleeping surface (See Application paragraph 0011). This central region is preferably 2-12 inches wide to ensure that the firm-to-less-firm transition on each side of the mattress is relatively close to the center of the mattress (See Claim 5). In contrast, firmness transitions that are relatively close to the mattress outer edges on each side of the mattress would not prevent the formation of a central ridge in the mattress because repeated use of the mattress would continue to compress portions of the wider reduced-firmness area, resulting in the formation of a central ridge. An associated box spring or box springs, as shown in Fig. 2, may also, or instead, present a central region with reduced firmness (See Application paragraphs 0009 and 0010). Furthermore, an adjustable member may be employed to controllably compensate for the development of a central ridge in the mattress (See Application paragraph 0014).

The Talbert et al. patent describes a cushion construction, as shown in Fig. 1, with an outer band surrounding a central area that supports the edges of the cushion to prevent collapse or "rollover" off the edges of the cushion. According to Fig. 1, the central area of Talbert et al. does not traverse the cushion from the head end to foot end. Also, Fig. 1 shows that the surrounding band is substantially close to the outer edges of the cushion to prevent "edge collapse" that "occurs on upholstered furniture. (col. 1, lines 25-30). Because Talbert et al. is only concerned with edge collapse, Talbert et al. has the outer band 30 substantially close to the cushion edges. Thus, Talbert et al. neither teaches nor suggests using a central area of 2 to 12 inches to prevent the formation of a central ridge.

The Bonaddio et al. patent describes a mattress border construction, as shown in Fig. 1, surrounding the head, foot, and sides of a mattress with an encased row of springs to "stabilize the edge or border portion of the mattress" (col. 1, lines 6-7). The Banaddio et al. neither teaches nor suggests using a central area of 2 to 12 inches to prevent the formation of a central ridge because Bonaddio et al. is solving a completely different problem of edge stability.

The Fultz et al. patent is arguably the closest prior art to the present invention and describes a mattress fabrication method wherein softer latex is delivered to a central area and harder latex is delivered to a surrounding area or side areas as shown in Fig. 6. Fultz et al., however, only teaches having a central region with sides regions that are substantially close to the mattress edges. Fultz et al. will only "prevent the tendency of the edges to be rounded or will prevent the sleeper form rolling off" (col. 3, lines 63-65). Thus, Fultz et al., as the closest prior art, neither teaches nor suggests using a central area of 2 to 12 inches to prevent the formation of a central ridge because Fultz et al. is interested in solving the completely differently problem of edge stability. Fultz et al. also discloses a 43% reduction in center region firmness compared with the side regions based on the densities of the central (.2 g/cm^3) and side (.35 g/cm^3) regions (col. 2, lines 43-52).

The Klancnik patent describes a mattress with support strips traversing from head to foot near each of the two longitudinal edges of the unit. The strips are "secured to the first, second, and/or third outermost rows at the sides of the unit, which is the region where additional firmness is usually desired" (col. 3, lines 2-5). Thus, Klancnik neither teaches nor suggests using a central area of 2 to 12 inches to prevent the formation of a central ridge because Klancnik is interested in solving the completely differently problem of edge stability.

The Sabalaskey patent describes a mattress with a firming edge of upholster foam layer for a firmer mattress edge as shown in Fig. 1. The firmer mattress edge surrounds the entire

"perimeter" of the mattress and does not define a central region with two side regions. Thus, Sabalaskey neither teaches nor suggests using a central area of 2 to 12 inches to prevent the formation of a central ridge because Sabalaskey is interested in solving the completely differently problem of perimeter edge stability.

The Perry patent describes a method of making a pneumatic mattress for a single user, as shown in Figs. 16 and 17, that uses stiffer edges "to prevent instability, rolling and curling" (page 3, col. 1, lines 66-72). Thus, Perry neither teaches nor suggests using a central area of 2 to 12 inches to prevent the formation of a central ridge because Perry is interested in solving the completely differently problem of providing single user stability within a pneumatic (air) mattress using converging sides (page 3, col. 1, lines 61-64).

The Jarvis patent describes a casket mattress, as shown in Fig. 2, with an adjustable center area used to raise or lower a human body in order to push the shoulder forward or lower the abdomen for display. The mattress is not designed for repeated use that may result in the formation of a central ridge because the mattress provides stability for a dead body laying on the casket mattress which should only be used once. Thus, Jarvis neither teaches nor suggests using a central area of 2 to 12 inches to prevent the formation of a central ridge because Jarvis is interested in solving the completely differently problem of providing stability for a single dead body by "firmly hold[ing] the body in [an] adjusted position" (col.1, line 17).

While the Applicant has canceled Claim 5, the limitation of Claim 5 has been incorporated into base Claim 1, as amended. Thus, the Examiner's rejection of Claim 5 under 35 U.S.C. § 103(a) as allegedly unpatentable over Talbert et al. or Bonaddio et al. or Fultz et al. or Klancnik or Sabalaskey or Perry or Jarvis., as originally filed, now applies to amended base Claim 1. The Applicant respectfully traverses the rejection.

According to the Examiner, Claim 5 as originally filed, but now amended base Claim 1, was rejected under 103(a) because "Talbert et al. or Bonaddio et al. or Fultz et al. or Klancnik or Sabalaskey or Perry or Jarvis all disclose the invention substantially as claimed" (Office Action, Section 14). The Examiner further stated in Section 14:

> However, they all are silent about their center region being about 2 to 12 inches wide. It would have been obvious to one of ordinary skill in the art to modify either Talbert et al. or Bonaddio et al. or Fultz et al. or Klancnik or Sabalaskey or Perry or Jarvis to have their center region be about 2 to 12 inches wide since such a modification is a design choice. Such a modification prevents the center of the mattress from totally collapsing inwardly.

The Applicant respectfully disagrees. The Examiner, in Section 14, admitted that neither Talbert et al. nor Bonaddio et al. nor Fultz et al. nor Klancnik nor Sabalaskey nor Perry nor Jarvis disclose that the "center region be about 2 to 12 inches wide." The Examiner alleged, however, that it would be obvious to move the firm-to-less-firm transition from substantially close to the edges of the prior art cited to within 1 to 6 inches of the center of the mattress.

As described previously, Talbert et al., Bonaddio et al., Fultz et al., Klancnik, Sabalaskey, Perry, and Jarvis are all interested in solving the problem of mattress stability by providing a firmer area on the sides or perimeter of a mattress or cushion. To provide such stability, the firmer region in each reference is necessarily substantially close to the side or perimeter edges of the mattress or cushion. In contrast, the present invention, as recited in Claim 1, uses a reduced firmness center region of 2-12 inches width to prevent center ridge formation which is not substantially close to the mattress edges. Alternatively, an increased firmness center region of 2-12 inches width may be employed. Thus, neither Talbert et al. nor Bonaddio et al. nor Fultz et al. nor Klancnik nor Sabalaskey nor Perry nor Jarvis, whether taken alone or in any reasonable combination, discloses, teaches, or suggests the combination of features recited in amended base Claim 1.

While edge stability is addressed by the prior art cited, center ridge prevention, a significantly different problem, is addressed by the present invention as recited by base Claim 1. Because the stiffer regions are substantially close to the side and/or perimeter edges of Talbert et al., Bonaddio et al., Fultz et al., Klancnik, Sabalaskey, Perry, and Jarvis, these stiffer regions do not prevent ridge formation in the center because a significant portion of the less firm center area remains subject to repeated use, resulting in compression, even of the less firm material, and eventual center ridge formation. In contrast, the 2-12 inch center region of the present invention is typically not subject to repeated use because users of the mattress are not expected to lay or sit on the center region substantially.

The Examiner's has stated that "such modification prevents the center of the mattress from totally collapsing inwardly" (Office Action, Section 14). Again, the applicant observes that if the firm-to-less-firm transition were moved substantially away from the mattress or cushion edges as disclosed in Talbert et al., Bonaddio et al., Fultz et al., Klancnik, Sabalaskey, Perry, or Jarvis, loss of mattress or body stability, edge collapse, or "rollover" would be the result, rendering each cited reference unsatisfactory for its intended purpose. Thus, there is no motivation or suggestion of desirability in any of the references cited to modify Talbert et al., Bonaddio et al., Fultz et al., Klancnik, Sabalaskey, Perry, or Jarvis to realize the invention as cited in amended Claim 1.

With regard to Perry and Jarvis, because each mattress holds a single body, positioned over the center of the mattress, center ridge formation does not occur. For this reason also, there is no motivation or suggestion to modify Perry or Jarvis to realize the invention as cited in amended Claim 1.

Because there is no suggestion or motivation, either in Talbert et al., Bonaddio et al., Fultz et al., Klancnik, Sabalaskey, Perry, or Jarvis, or in the knowledge generally available to

one of ordinary skill in the art, to modify the cited references, the Examiner has failed to make a prima facie case of obviousness for amended base Claim 1. Also, because the prior art references , taken alone or in combination, neither teach nor suggest the invention as claimed in amended base Claim 1, the Examiner has failed to make a prima facie case of obviousness for amended base Claim 1.

Therefore, the Applicant respectfully submits that the rejection regarding amended base Claim 1 under 35 U.S.C. § 103(a) based on Talbert et al. or Bonaddio et al. or Fultz et al. or Klancnik or Sabalaskey or Perry or Jarvis should be withdrawn.

Because Claims 2-4 and 6-13 are dependent on and limited by now allowable Claim 1 either directly or indirectly, the Applicant respectfully submits that the various rejections of Claims 2-4 and 6-13 should be withdrawn, for the same reasons as stated above.

Because amended base Claim 18 now incorporates the limitations of canceled Claim 5, the Applicant submits that the rejections of amended base Claim 18 should be withdrawn, for the same reasons as stated above regarding amended base Claim 1.

Because Claim 19 is dependent on and limited by now allowable base Claim 18, the Applicant respectfully submits that the rejections of Claims 19 should be withdrawn.

Because amended base Claim 20 now incorporates the limitations of canceled Claim 5, the Applicant submits that the rejections of amended base Claim 20 should be withdrawn, for the same reasons as stated above regarding amended base Claim 1.

Because amended base Claim 21 now incorporates the limitations of canceled Claim 5, the Applicant submits that the rejections of amended base Claim 21 should be withdrawn, for the same reasons as stated above regarding amended base Claim 1.

Because Claim 22 is dependent on and limited by now allowable base Claim 21, the Applicant respectfully submits that the rejections of Claims 22 should be withdrawn.

Because amended base Claim 23 now incorporates the limitations of canceled Claim 5, the Applicant submits that the rejections of amended base Claim 23 should be withdrawn, for the same reasons as stated above regarding amended base Claim 1.

New Claims 24-28 are supported by the Application as originally filed on page 5, paragraph 0018. Because Claims 24-28 depend from amended Claims 1, 18, 20, 21, and 23 respectively, these claims should be in an allowable condition.

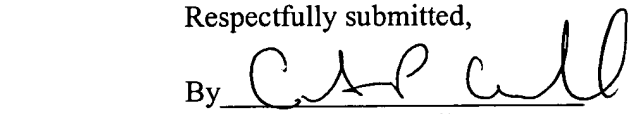
CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. SMCY-P01-104 from which the undersigned is authorized to draw.

Dated: January 21, 2004

Respectfully submitted,

By 

Christopher P. Carroll
Registration No.: 55,776
ROPES & GRAY LLP
One International Place
Boston, Massachusetts 02110-2624
(617) 951-7000
(617) 951-7050 (Fax)
Attorneys/Agents For Applicant